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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,641	09/29/2004	Christian Drohmann	53383	4300

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EXAMINER

POPOVICS, ROBERT J

ART UNIT	PAPER NUMBER
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1724

MAIL DATE	DELIVERY MODE
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07/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,641	Applicant(s) DROHMANN ET AL.	
	Examiner Robert J. Popovics	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/23/07, 1/29/07 and 12/18/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **December 18, 2006** has been entered.

Information Disclosure Statement

The information disclosure statement filed **December 18, 2006** fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of all patents, publications, applications, or other information submitted for consideration by the Office; (2) U.S. patents and U.S. patent application publications listed in a section separately from citations of other documents; (3) the application number of the application in which the information disclosure statement is being submitted on each page of the list; (4) a column that provides a blank space next to each document to be considered, for the examiner's initials; and (5) a heading that clearly indicates that the list is an information disclosure statement. The information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

The information disclosure statement filed **December 18, 2006** fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent/document listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Official Notice

Official Notice of the following is taken:

- 1) **Polystyrene** is a well known conventional filtration aid.
- 2) **PVPP** is a well known conventional filtration aid and/or stabilization agent
- 3) **Compounding** is a well known conventional technique for mixing polymers and/or with other materials. Conventionally known twin screw extruders are often used to compound or mix polymers and/or with other materials.
- 4) **Popcorn polymerization** is a well known conventional polymerization method in which the growing polymer chains are crosslinked to one another. The resultant popcorn polymers are generally insoluble and scarcely swellable.
- 5) Those skilled in the art are aware of Official Notice statements 1-4.

Claim Rejections - 35 USC § 103

Claims 11-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of **Klein (US 4,344,846)** and **Butterworth (US 3,958,023)**. **Butterworth** discloses the use of **PVPP** admixed with conventional filter aids to treat liquids. (see column 2 and claims 1 and 4 of **Butterworth**). **Butterworth** does not expressly disclose polystyrene. **Klein** discloses the use of polystyrene as a filtration aid. It would have been obvious to one skilled in the art to mix (i.e., compound) polystyrene with PVPP in order to practice the invention of **Butterworth**. The Official Notice statements made above are relied on to the extent that they are needed. The various claimed percentages are parameters that would have been routinely optimized/manipulated by those skilled in the art.

Response to Amendment

The Declarations filed under 37 CFR 1.132 filed **December 18, 2006** are noted. It is unclear why they were provided, or what they are intended to establish.

Any inquiry concerning this communication should be directed to Robert J. Popovics at telephone number (571) 272-1164.

A handwritten signature in black ink, appearing to read 'RJP', with a large, stylized flourish extending from the end.

**Robert James Popovics
Primary Examiner
Art Unit 1724**